

PTO-1449 REPRODUCED			OUR DOCKET NO. 3650.1004-008	APPLICATION NO. 10/743,360
O I P R E D U C E D INFORMATION DISCLOSURE CITATION IN AN APPLICATION			FIRST NAMED INVENTOR Stavros C. Manolagas	FILING DATE December 22, 2003
JUL 09 2004 U.S. PATENT & TRADEMARK OFFICE (Use several sheets if necessary)			EXAMINER Not Assigned Falk	CONFIRMATION NO. 9347
				GROUP 1614 1632

U.S. PATENT DOCUMENTS				
EXAMINER INITIAL	REF. NO.	DOCUMENT NUMBER Number-Kind Code (if known)	ISSUE DATE / PUBLICATION DATE MM-DD-YYYY	NAME OF PATENTEE OR APPLICANT OF CITED DOCUMENT
AMF	AA	4,588,716	DeLuca,, H.F., et al.	05-13-1986
	AB	4,833,125	Neer, R.M., et al.	05-23-1989
	AC	5,118,667	Adams, S.W., et al	06-02-1992
	AD	5,164,368	Recker, R.R., et al	11-17-1992
	AE	5,510,370	Hock, J.M., et al.	04-23-1996
	AF	5,565,444	Mizushima, Y., et al.	10-15-1996
	AG	5,747,456	Chorev, M., et al.	05-05-1998
	AH	5,821,225	Vickery, B.H., et al.	10-13-1998
	AI	5,955,425	Morley, P., et al.	09-21-1999
	AJ	5,977,070	Piazza, C.T., et al.	11-02-1999
▼	AK	6,660,468 B1	Manolagas, et al.	12-09-2003
AMF	AA2	US 2002/0137209 A1	Kousteni, et al.	09-26-2002
	AB2			
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		DOCUMENT NUMBER Country Code-Number-Kind Code (if known)	DATE MM-DD-YYYY	NAME OF PATENTEE OR APPLICANT OF CITED DOCUMENT	TRANSLATION YES NO
AMF	AL	WO 94/03201	02-17-1994	Hilliker, S.	
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
AMF	AR	Aarden, E.M., et al., "Function of Osteocytes in Bone," <i>J. Cell. Biochem.</i> 55: 287-299 (1994).
	AS	Amling, M., et al., "Bcl-2 Lies Downstream of Parathyroid Hormone-related Peptide in a Signaling Pathway that Regulates Chondrocyte Maturation During Skeletal Development," <i>Journal of Cell Biology</i> 136: 205-213 (1997).
	AT	Bellido, T., et al., "Overexpression of Bcl-2 Renders Osteoblastic Cells Refractory to Glucocorticoid-Induced Apoptosis," <i>Bone</i> 23: S324 (1998).
	AU	Bursch, W., et al., "Determination of the Length of the Histological Stages of Apoptosis in Normal Liver and in Altered Hepatic Foci of Rats," <i>Carcinogenesis</i> 11: 847-853 (1990).
	AV	Dempster, D.W., et al., "Anabolic Actions of Parathyroid Hormone on Bone," <i>Endocrine Reviews</i> 14: 690-691 (1993).
	AW	Dobnig, H., et al., "Evidence that Intermittent Treatment with Parathyroid Hormone Increase Bone Formation in Adult Rats by Activation of Bone Lining Cells," <i>Endocrinology</i> 136: 3632-3638 (1995).
	AX	Finkelstein, J.S., et al., "Prevention of Estrogen Deficiency-Related Bone Loss With Human Parathyroid Hormone-(1-34)," <i>JAMA</i> 280: 945-1030 1067-1073 (1998).
	AY	Franceschi, R.T., et al., "Regulation of Type I Collagen Synthesis by 1,25-Dihydroxyvitamin D3 in Human Osteosarcoma Cells," <i>Journal of Biological Chemistry</i> 263: 18938-18945 (1988).
	AZ	Hsu, S., et al., "Color Modification of Diaminobenzine (DAB) Precipitation by Metallic Ions and its Application for Double Immunohistochemistry," <i>J. of Histochemistry and Cytochemistry</i> 30: 1079-1082 (1982).
	AR2	Jilka, R.L., "Parathyroid Hormone-Stimulated Development of Osteoclasts in Cultures of Cells from Neonatal Murine Calvaria," <i>Bone</i> 7: 29-40 (1986).
↓	AS2	Jilka, R.L., et al., "Increased Osteoclast Development After Estrogen Loss: Mediation by Interleukin-6," <i>Science</i> 257: 88-91 (1992).
AMF	AT2	Jilka, R.L., et al., "Linkage of Decreased Bone Mass with Impaired Osteoblastogenesis in a Murine Model of Accelerated Senescence," <i>The Journal of Clinical Investigation</i> 97: 1732-1740 (1996).

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AMF	AU2	Jilka, R.L., <i>et al.</i> , "Loss of Estrogen Upregulates Osteoblastogenesis in the Murine Bone Marrow, Evidence of Autonomy from Factors Released During Bone Resorption," <i>The American Society for Clinical Investigation, Inc.</i> 101: 1942-1950 (1998).	
	AV2	Jilka, R.L., <i>et al.</i> , "PTH Increases Bone Formation by Postponing Osteoblast Apoptosis, Not By Increasing Precursor Proliferation," <i>Bone</i> 23: S519 (1998).	
	AW2	Jilka, R.L., <i>et al.</i> , "Osteoblast Programmed Cell Death (Apoptosis): Modulation by Growth fctors and Cytokines," <i>Journal of Bone and Mineral Research</i> 13(5): 793-802 (1998).	
	AX2	Kato, Y., <i>et al.</i> , "Establishment of an Osteocyte-Like Cell Line, MLO-Y4," <i>Journal of Bone and Mineral Research</i> 12: 2014-2023 (1997).	
	AY2	Lane, N.E., <i>et al.</i> , "Parathyroid Hormone Treatment Can Reverse Corticosteroid-induced Osteoporosis," <i>Journal of Clinical Investigation</i> 102: 1627-1633 (1998).	
	AZ2	Leaffer, D., <i>et al.</i> , "Modulation of Osteogenic Cell Ultrastructure by RS-23581, an Analog of Human Parathyroid (PTH)-Related Peptide-(1-34), and Bovine PTH-(1-34)," <i>Endocrinology</i> 136(8): 3624-3631 (1995).	
	AR3	Lee, K., <i>et al.</i> , "Parathyroid Hormone-Related Peptide Delays Terminal Differentiation of Chondrocytes During Endochondral Bone Development," <i>Endocrinology</i> 137: 5109-5118 (1996).	
	AS3	Manolagas, S.C., <i>et al.</i> , "Bone Marrow, Cytokines, and Bone Remodeling: Emerging Insights into the Pathophysiology of Osteoporosis," <i>New England Journal of Medicine</i> 332: 305-311 (1995).	
	AT3	Parfitt, A.M., <i>et al.</i> , "Bone Histomorphometry: Standardization of Nomenclature, Symbols, and Units," <i>Journal of Bone and Mineral Research</i> 2: 595-610 (1987).	
	AU3	Reeve, J., <i>et al.</i> , "Anabolic Effect of Human Parathyroid Hormone fragment on Trabecular Bone in Involutional osteoporosis: a Multicentre Trial," <i>British Medical Journal</i> 280: 1333-1390 (1980).	
↓	AV3	Reeve, J., <i>et al.</i> , "Anabolic Effect of Low Doses of a Fragment of Human Parathyroid Hormone on the Skeleton in Postmenopausal Osteoporosis," <i>Lancet</i> 1:1035-1038 (1976).	
AMF	AW3	Stewart, A.F., "PTHrP(1-36) as a Skeletal Anabolic Agent for the treatment of Osteoporosis," <i>Bone</i> 19: 303-306 (1996).	

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	AX3	Sudo, H., <i>et al.</i> , "In Vitro Differentiation and Calcification in a New Clonal Osteogenic Cell Line Derived from Newborn Mouse Calvaria," <i>Journal of Cell Biology</i> 96: 191-198 (1983).	
	AY3	Tam, C.S., <i>et al.</i> , "Parathyroid Hormone Stimulates the Bone Apposition rate Independently of Its Resorptive Action: Differential Effects of Intermittent and Continuous Administration," <i>Endocrinology</i> 110: 506-512 (1982).	
	AZ3	Thornberry, N.A., <i>et al.</i> , "Caspases: Enemies Within," <i>Science</i> 281: 1312-1316 (1998).	
	AR4	Vickery B.H., <i>et al.</i> , "RS-66271, a C-Terminally Substituted analog of Human Parathyroid Hormone-Related Protein (1-34), Increases Trabecular and Cortical Bone in Ovariectomized, Osteopenic Rats," <i>Journal of Bone and Mineral Research</i> 11: 1943-1951 (1996).	
	AS4	Weinstein, R.S., <i>et al.</i> , "Inhibition of Osteoblastogenesis and Promotion of Apoptosis of Osteoblasts and Osteocytes by Glucocorticoids," <i>The Journal of Clinical Investigation</i> 102: 274-282 (1998).	
	AT4	Wright, S.C., <i>et al.</i> , "Activation of CPP32-like Proteases Is Not Sufficient to Trigger Apoptosis: Inhibition of Apoptosis by Agents that Suppress Activation of AP24, but Not CPP32-like Activity," <i>Journal of Experimental Medicine</i> 186: 1107-1117 (1997).	
	AU4	Bellido, <i>et al.</i> , "PTH Prevents Glucocorticoid Apoptosis of Osteoblasts and Osteocytes In Vitro: Direct Interference with a Private Death Pathway Upstream of Caspase-3," Abstract. <i>Bone</i> 5: S518: F458 (1998).	
	AV4	Dempster, D.W., "Exploiting and Bypassing the Bone Remodeling Cycle to Optimize the Treatment of Osteoporosis," <i>Journal of Bone and Mineral Research</i> 12(8): 1152-1154 (1997).	
	AW4	Ferretti, J.L., <i>et al.</i> , "Perspectives on Osteoporosis Research: Its Focus and Some Insights from a New Paradigm," <i>Calcif. Tissue Int.</i> 57: 399 (1995).	
	AX4	Forrest, S.M., <i>et al.</i> , "Characterization of an Osteoblast-like Clonal Cell Line Which Responds to both Parathyroid Hormone and Calcitonin," <i>Calcif. Tissue Int.</i> 37: 51-56 (1985).	
↓	AY4	Gohel, A., <i>et al.</i> , "Glucocorticoids Induce Apoptosis in Osteoblasts by the Regulation of Bcl-2, BAX and Other Cell Cycle Factor," <i>Journal of Bone and Mineral Research</i> . Abstract F234: S284 (1997).	
AMF	AZ4	Hughes, D.E., <i>et al.</i> , "Apoptosis in Bone Physiology and Disease," MP. <i>Molecular Pathology</i> , BMJ Publishing Group, Vol. 50: 132-137 (1997) London, GB.	

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AMF	ARS	Hughes, D.E., et al., "Bisphosphonates Promote Apoptosis in Murine Osteoclasts In Vitro and In Vivo," <i>Journal of Bone and Mineral Research</i> 10 (10): 1478-1487 (1995).	
	AS5	Iida-Klein, A., et al., "Effects of Calcitonin on 3', 5'-Cyclic Adenosine Monophosphate and Calcium Second Messenger Generation and Osteoblast Function in UMR 106-06 Osteoblast-Like Cells," <i>Endocrinology</i> 130(1): 381-388 (1992).	
	AT5	Jilka, R.L., et al., "Dexamethasone Promotes Apoptosis of Osteoblast Progenitors in Murine Bone Marrow Cultures: Antagonism by IL-6 Type Cytokines," <i>Journal of Bone and Mineral Research</i> 12(Supp): S455, Abstract No. S411 (1997).	
	AUS	Jilka, R.L., et al., "Increased Bone Formation by Prevention of Osteoblast Apoptosis with Parathyroid Hormone," <i>Journal of Clinical Investigation</i> 104(4): 439-466 (1999).	
	AV5	Kameda, T., et al., "Estrogen Inhibits Bone Resorption by Directly Inducing Apoptosis of the Bone-Resorbing Osteoclasts," <i>The Journal of Experimental Medicine</i> 186(3): 489-495 (1997).	
	AW5	Lian, J.B., et al., "Species-Specific Glucocorticoid and 1,25 Dihydroxyvitamin D Responsiveness in Mouse MC3T3-E1 Osteoblasts: Dexamethadone Inhibits Osteoblast Differentiation and Vitamin D Downregulates Osteocalcin Gene Expression," <i>Endocrinology</i> 138(5): 2117-2127 (1997).	
	AX5	Manolagas, S.C., et al., "New Developments in the Pathogenesis and Treatment of Steroid-induced Osteoporosis," <i>Journal of Bone and Mineral Research</i> 14(7): 1061-1066 (1999).	
	AY5	Manolagas, S.c., et al., "Opposite Effects of Estrogen on the Life Span of Osteoblasts/Osteocytes Versus Osteoclasts In Vivo and In Vitro: An Explanation of the Imbalance Between Formulation and Resorption in Estrogen Deficiency," <i>Journal of Bone and Mineral Research</i> 14: Abstract No. S169 (1999).	
	AZ5	Marotti, G., et al., "Structure-function Relationships in the Osteocyte," <i>Italian Journal of Mineral & Electrolyte Metabolism</i> 4(2): 93-106 (1990).	
	AR6	Nishikawa, M., et al., "Bisphosphonates Act on Osteoblastic Cells and Inhibit Osteoclast Formation in Mouse Marrow Cultures," <i>Bone</i> 18(1): 9-14 (1996).	
↓	AS6	Parfitt, A.M., "Bone Forming Cells in Clinical Conditions," <i>Bone</i> , Vol. 1, 351-429, CRC Press, Boca Raton (1996).	
AMF	AT6	Plotkin, L.I., et al., "Bisphosphonates Prevent Glucocorticoid-Induced Apoptosis of Osteocytes in Vitro: a Putative Mechanism Influencing Mechanosensing," <i>Bone</i> 23: S157 (1998).	

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AMF	AU6	EXAMINER Not Assigned	CONFIRMATION NO. 9347
	AV6	GROUP 1614	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
AMF	AU6	Plotkin, L.I., et al., "Prevention of Osteocyte and Osteoblast Apoptosis by Bisphosphonates and Calcitonin," <i>Journal of Clinical Investigation</i> 104(10): 1363-1374 (1999).	
	AV6	Pompeiano, M., et al., "Onset of Apoptotic DNA Fragmentation Can Precede Cell Elimination by Days in the Small Intestine Villus," <i>Cell Death and Differentiation</i> 5: 702-709 (1998).	
	AW6	Sahni, M., et al., "Bisphosphonates Act on Rat Bone Resorption Through the Mediation of Osteoblasts," <i>Journal of Clinical Investigation</i> 91: 2004-2011 (1993).	
	AX6	Short, B.G., et al., "Automated Double Labeling of Proliferation and Apoptosis in Glutathione S-Transferase-Positive Hepatocytes in Rats," <i>Journal of Histochemistry & Cytochemistry</i> 45(9): 1299-1305 (1997).	
	AY6	Verbeijen, M.H., et al., "Parathyroid Hormone Activates Mitogen-activated Protein Kinase via cAmP-mediated Pathway Independent of Ras," <i>Journal of Biological Chemistry</i> 272(6): 3423-3429 (1997).	
	AZ6	Weinstein, R.S., et al., "The Effects of Androgen Deficiency on Murine Bone Remodeling and Bone Mineral Density are Mediated via Cells of the Osteoblastic Lineage," <i>Endocrinology</i> 138(9): 4013-4021 (1997).	
	AR7	Schwartz, Z., et al., "Differential Regulation of Prostaglandin E2 Synthesis and Phospholipase Activity by 1,25-(OH)2D3 in Three Osteoblast-like Cell Lines (MC-3T3-E1, ROS 17/2.8, and MG-63)," <i>Bone</i> 13(1): 51-8 (1992).	
	AS7	Lane, J.M., et al., "Intermittent Treatment with Human Parathyroid Hormone (hPTH[1-34]) Increased Trabecular Bone Volume but Not Connectivity in Osteopenic Rats," <i>Journal of Bone and Mineral Research</i> 10(10): 1470-1477 (1995)	
	AT7	Gunness, M., et al., "Anabolic Effect of Parathyroid Hormone on Cancellous and Cortical Bone Histology," <i>Bone</i> : 14, 277-281 (1993).	
	AU7	Hill, P.A., et al., "Multiple Extracellular Signals Promote Osteoblast Survival and Apoptosis," <i>Endocrinology</i> : 138(9), 3849-3858 (1997).	
↓	AV7	Lecka-Czernik, B., et al., "Cellular and Molecular Biomarkers Indicate Precocious In Vitro Senescence in Fibroblasts from SAMP6 Mice," <i>Journal of Gerontology</i> : 52A(6), B331-B336 (1997).	
AMF	AW7	Meng, X.W., et al., "Temporal Expression of the Anabolic Action of PTH in Cancellous Bone of Ovariectomized Rats," <i>Journal of Bone and Mineral Research</i> : 11(4), 421-429 (1996).	

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AMF	AX7	Okamoto, Y., "Femoral Peak Bone Mass and Osteoclast Number in an Animal Model of Age-Related Spontaneous Osteopenia," <i>The Anatomical Record</i> : 242, 21-28 (1995).
	AY7	Cornish, J., "An In Vivo Model for the Rapid Assessment of the Local Effects of Parathyroid Hormone on Bone Histomorphometry," <i>Bone</i> : 17(4) Supp., 249S-254S (1995).
	AZ7	Fujibayashi, <i>et al.</i> , "Differential Aging Pattern of Cerebral Accumulation of Radiolabeled Glucose and Amino Acid in the Senescence Accelerated Mouse (SAM), a New Model for the Study of Memory Impairment., <i>Biological and Pharmaceutical Bulletin</i> , 17(1):102-105 (1994).
	AR8	Lane, N.E., <i>et al.</i> , "Prevention and Management of Glucocorticoid-Induced Osteoporosis", <i>Bulletin on the Rheumatic Diseases</i> , 44(5):1-4 (1995).
AMF	AS8	Lane, N.E., <i>et al.</i> , "The Science and Therapy of Glucocorticoid-Induced Bone Loss", <i>Endocrinology and Metabolism Clinics of North American</i> , 27(2):465-483. (1998).
	AT8	Lane, N.E., <i>et al.</i>, Abstract No. 1757, page S324 (1997).

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AMF	AM	WO 99/61044	12/02/1999	The Board of Trustees of the University of Arkansas	
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